

PATENT APPLICATI

HAY 15 2061 TC 2800 HAIL ROOM

UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Toshiro HAYAKAWA, et al.

Application No.: 09/315,068

Confirmation No.: To be Assigned

Filed: May 20, 1999

Group Art Unit: 2881

Examiner: Jeffrey N. Zahn

SEMICONDUCTOR LASER AND METHOD OF MANUFACTURING THE SAME For:

AMENDMENT UNDER 37 C.F.R. § 1.111

Commissioner for Patents Washington, D.C. 20231

Sir:

In response to the Office Action dated February 13, 2001, please amend the aboveidentified application as follows:

IN THE SPECIFICATION:

Page 5, replace the second full paragraph (lines 12-18) as follows:

Accordingly, a method in which etching is carried out up to a portion immediately above the active layer has been generally employed. Figure 2 shows a ridge waveguide type laser having an n-side electrode 20, an n-GaAs substrate 11, an n-GaAs buffer layer 12, an n-AlGaAs cladding layer 13, an undoped SCH active layer 14, a p-AlGaAs cladding layer 16, a p-GaAs capping layer 17, a SiO₂ insulating film 18, and a p-side electrode 19. In this case, etching is carried out so that the upper cladding layer 16 is left in a small thickness 15 (about 0.1 to 0.3 µm) by controlling the etching time.

